



HYDRAULIC COMPONENTS

FOR MARINE SECTOR



K3VL

Medium pressure, swash plate, open loop axial piston pumps



Features:

- High power density
- High performances
- High reliability
- High self priming capability
- Wide range of controls
- Spherical valve plate
- Standard ISO / SAE mounting and porting
- Through drive options
- Torque control available

Pump model	Displacement cm ³ /n	Rated pressure MPa	Peak pressure MPa	Rotation speed n/min.	
				Max. for self-priming	Max.
K3VL 28	28	32	35	3.000	3.600
K3VL 45	45	32	35	2.700	3.250
K3VL 60	60	25	28	2.400	3.000
K3VL 80	80	32	35	2.400	3.000
K3VL 112	112	32	35	2.200	2.700
K3VL 140	140	32	35	2.200	2.500
K3VL 200	200	32	35	1.900	2.200
K3VL 200H	200	32	35	2.200	2.200

PMV

Proportional electro-hydraulic control for K3VL pump series



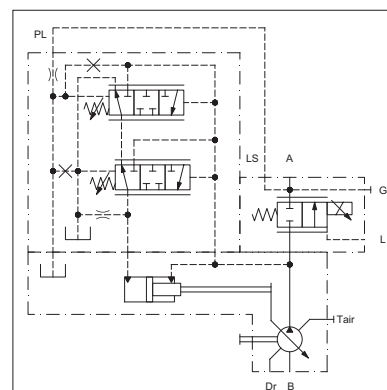
Features:

- Compact dimensions
- Flanged to the pump outlet
- Maximum flow limited by screw
- Flow control independent by the pump speed
- 12V DC and 24V DC solenoids available

The PMV valve is an electro-proportional flow control for K3VL pumps with LS control.

The valve is designed to be directly flanged to the K3VL45, 60 e 80 pumps with 1" SAE 3000 outlet ports.

The valve can be combined with the constant power control and the electro-proportional pressure control for a complete control of the system performances.



HMB

Fixed displacement radial piston motors



Features:

- High performance
- High reliability
- Good cavitation tolerance
- Large variety of porting options
- Speed and positioning control options
- High starting and running torque
- Wide range of displacements available

Motor model	Displacement cm³/n	Average actual running torque Nm / MPa	Continuous speed n/min.	Continuous power kW	Rated pressure MPa	Intermittent pressure MPa
HMB 010	188	27,9	500	25	20,7	24
HMB 030	442	65,6	450	42		25
HMB 045	740	109,5	400	60		
HMB 060	983	145	300	80		
HMB 080	1.344	199	300	100		
HMB 100	1.639	243	250	110		
HMB 125	2.050	306,6	220	100		
HMB 150	2.470	369,5	220	115		
HMB 200	3.087	460,7	175	130		
HMB 270	4.310	637,9	125	140		
HMB 325	5.310	794	100	140		
HMB 400	6.800	1.010	120	190		

HMC

Dual displacement radial piston motors



Features:

- Dual displacement
- Constant horsepower control option
- High starting and running torque
- High mechanical efficiency
- Smooth, steady, low speed operation
- High performances
- Good cavitation tolerance
- Large variety of porting options
- Speed and positioning control options
- Wide range of displacements available

Motor model	Displacement cm ³ /n		Average actual running torque Nm / MPa	Continuous speed n/min.	Continuous power kW	Rated pressure MPa	Intermittent pressure MPa
HMC 030	Max.	492	68,6	450	60	20,7	29
	Min.	98	11,5	600	10		
HMC 045	Max.	737	106,3	450	99	25	27,5
	Min.	163	15,5	600	15		
HMC 080	Max.	1.475	239	270	138		
	Min.	164	15,7	630	12		
HMC 125	Max.	2.048	299	215	135		
	Min.	164	6	630	4		
HMC 200	Max.	3.080	466	175	174		
	Min.	164	6	630	5		
HMC 270	Max.	4.588	694	150	213		
	Min.	328	24	545	14		
HMC 325	Max.	5.326	844	130	213		
	Min.	328	24	545	14		

HPC

High power, dual displacement radial piston motors



Features:

- Dual displacement
- Constant horsepower control option
- High starting and running torque
- High mechanical efficiency
- Smooth, steady, low speed operation
- High performances
- Good cavitation tolerance
- Large variety of porting options
- Speed and positioning control options
- Wide range of displacements available
- Enhanced power performance

Motor model	Displacement cm ³ /n		Average actual running torque Nm / MPa	Continuous speed n/min.	Continuous power kW	Rated pressure MPa	Intermittent pressure MPa
HPC 080	Max.	1.600	241	365	165	25	27,5
	Min.	164	16	630	14		
HPC 125	Max.	2.048	308	300	202		
	Min.	164	8	630	5		
HPC 200	Max.	3.087	472	230	216		
	Min.	164	10	630	5		
HPC 270	Max.	4.588	701	150	278		
	Min.	328	40	278	21		
HPC 325	Max.	5.326	816	130	248		
	Min.	492	63	515	39		

HMF

High power, 3-speed, radial piston motors



Features:

- Dynamic displacement change
- 3 displacement modes or two displacement modes plus free wheel
- Speed sensor
- A wide range of displacements from 1.600 to 5.326 cm³/n
- Greater flexibility
- Faster response time

Motor model	Max. displacement cm ³ /n	Rated pressure MPa	Intermittent pressure MPa	Continuous speed max. disp. n/min.	Continuous speed min. disp. n/min.	Max. power kW	Weight kg
HMF 080	1.600	25	27,5	270	1.000	138	172
HMF 200	3.087			175		174	282
HMF 270	4.588			150		189	450
HMF 325	5.326			130		189	460

HPC 400

High power, 4-speed, radial piston motors



Features:

- Total displacement 6.554 cm³/n
- Max. continuous power of 430 kW
- Smooth operation at low speed
- Dynamic displacement change
- Rated torque of 25.000 Nm
- Freewheel option available
- Rugged Staffa design
- High starting torque
- 25 MPa continuous rating

Motor model	Front Displacement max. / min. cm ³ /n	Rear Displacement max. / min. cm ³ /n	Rated pressure MPa	Max. pressure MPa	Continuous speed max. disp. n/min.	Continuous speed min. disp. n/min.	Max. power kW
HPC 400	3.277 - 0	3.277 - 0	25	27,5	220	1.500	430

M3X

Fixed displacement axial piston motors



Features:

- Compact design
- High performance
- High reliability
- Male or female shaft options
- Built in parking brake option
- Advanced low speed characteristics
- Smooth starting characteristics
- High speed operation
- Wide capacity range

Motor model	Displacement cm ³ /n	Rated pressure MPa	Max. pressure MPa	Continuous speed n/min.	Continuous power kW
M3X 200	195	29,5	34	1.900	180
M3X 280	280			1.700	230
M3X 530	533			1.400	370
M3X 800	800			1.200	470

RICKMEIER

High flow, low pressure helical gear pumps for lubrication circuits

Rickmeier developed and produced gear pumps, valves and oil supply systems for lubrication circuits or fluid transportation. Typical application fields for Rickmeier products are the construction of diesel and gas engines, automotive engineering, chemical plant engineering, power plant technology, shipbuilding, wind energy utilization and countless other application fields in general engineering sectors where high efficiency and reliability are requested.



Helical gear pumps for lubrication circuits or fluids transportation for oils and other flow media.
Available displacements from 2,5 to 1.400 cm³/h
Max. pressure 2,5 MPa



Direct acting or piloted pressure control valves for lubrication circuits.



Complete lubrication and cooling systems for gearboxes or bearings according with customer specifications.



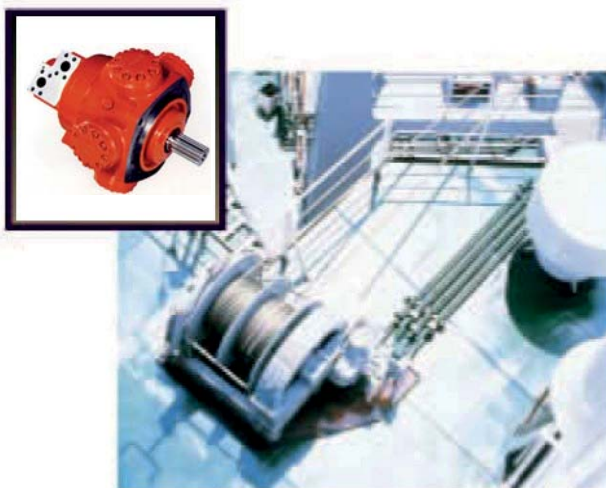
Development of pumps and special valves for lubrication systems or fluids transportation according with customer specifications.

Applications

Marine

Mooring Winch

HMB - HMC Radial Piston Motors



Winch

HMB - HMC Radial Piston Motors



Derrick Crane

K3VL - K3VG Axial Piston Pumps
HMB - HMC Radial Piston Motors